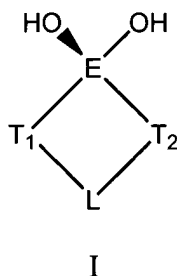


WHAT IS CLAIMED IS:

1. A method of controlling bacterial growth, comprising exposing a bacterium to a compound of structure I



- wherein E is selected from the group consisting of B, P, and S, T₁ and T₂ are each independently selected from the group consisting of O, NR, and CH₂, where R = H or C₁-C₈ alkyl, or C₁-C₈ oxoalkyl, and L is selected from the group consisting of ethylene, propylene, and four to six-membered alicyclic and aromatic rings, provided that structure I does not include AI-2-borate.
2. The method of claim 1, wherein E is B.
 3. The method of claim 2, wherein T₁ and T₂ are O.
 4. The method of claim 1, wherein the compound has a molecular weight less than about 750 Da.
 5. The method of claim 4, wherein the molecular weight is less than about 500 Da.
 6. The method of claim 1, wherein E is P.
 7. The method of claim 6, wherein T₁ and T₂ are O.
 8. The method of Claim 1 comprising administering a therapeutically effective amount of the compound to a human.
 9. The method of Claim 1 in which the bacterium is exposed to an amount of the compound that affects biofilm formation.